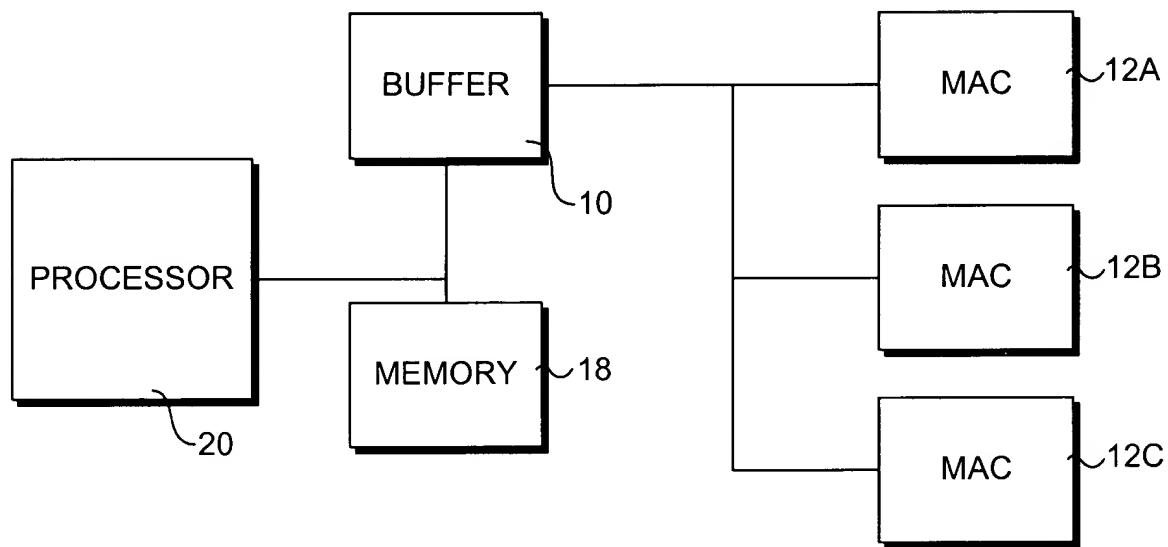
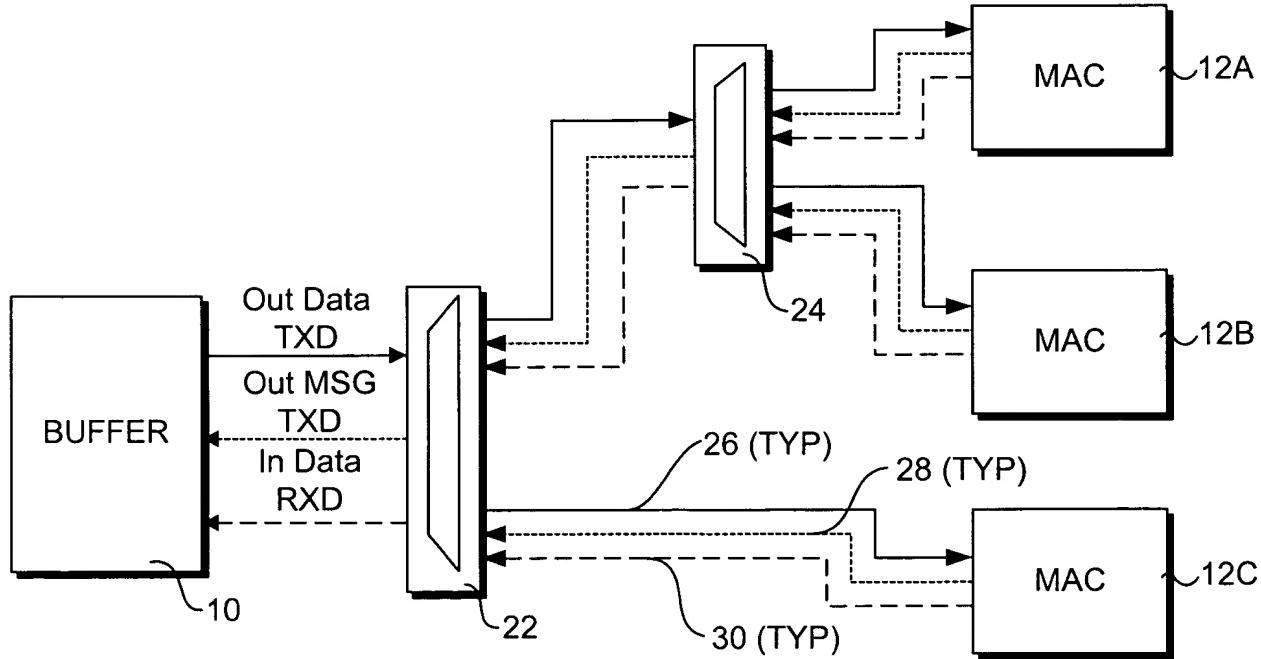


**FIG. 1**

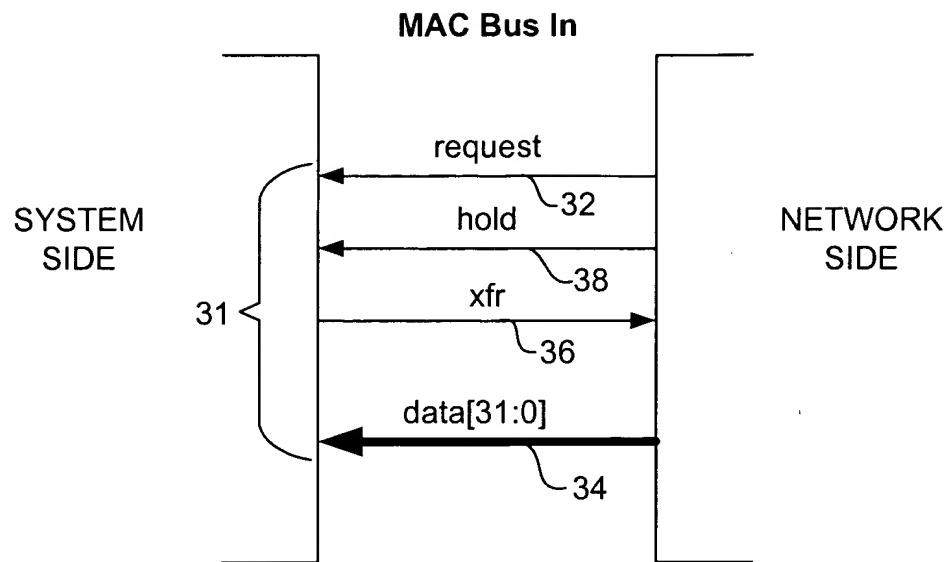


**FIG. 2**

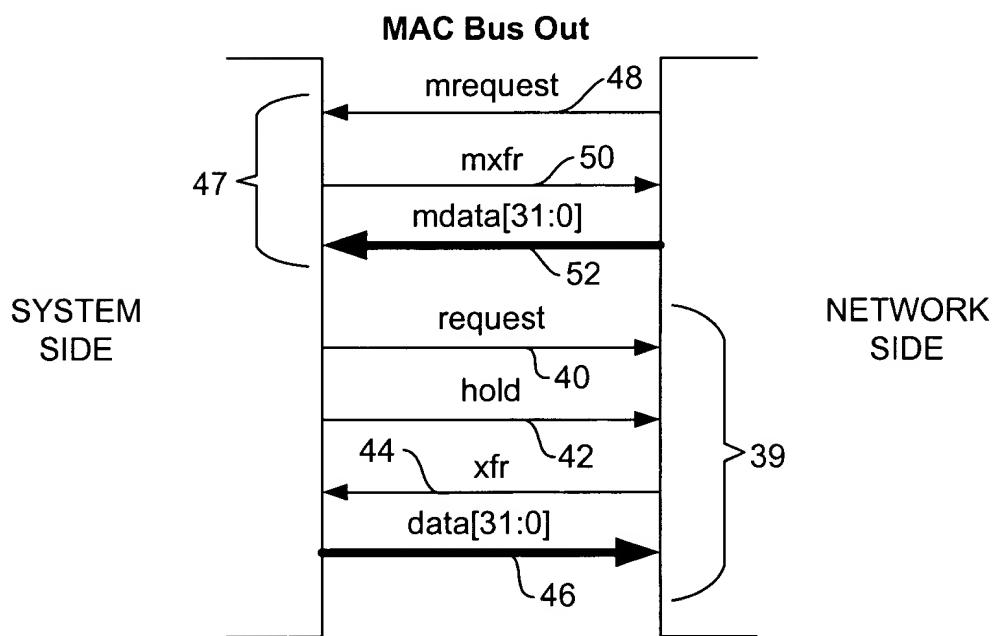


**FIG. 3**

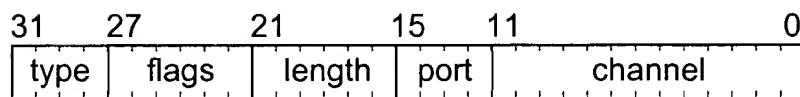
**FIG. 4**



**FIG. 5**

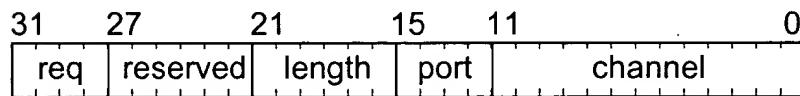


#### DATA PACKET HEADER WORD



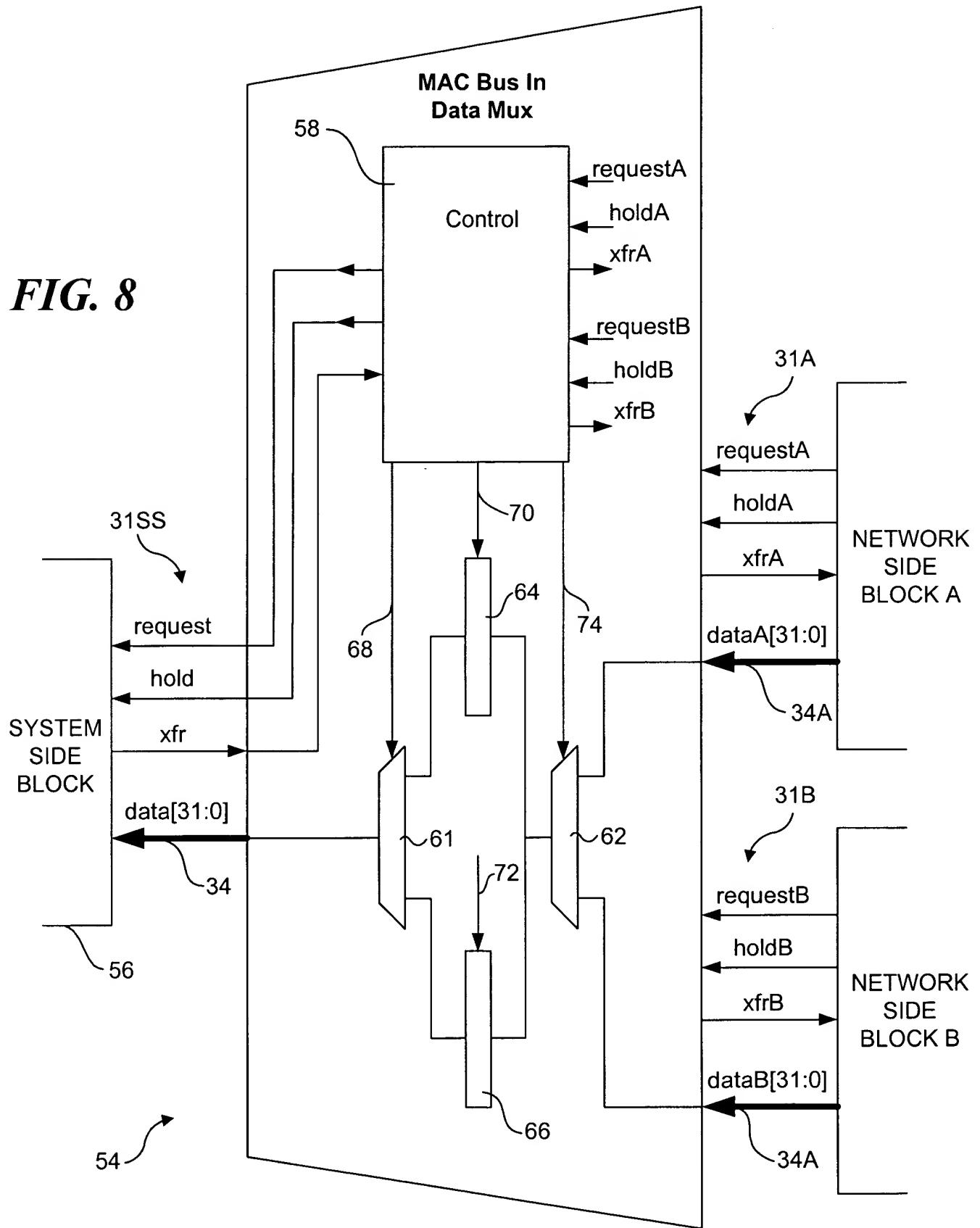
**FIG. 6**

#### REQUEST MESSAGE WORD

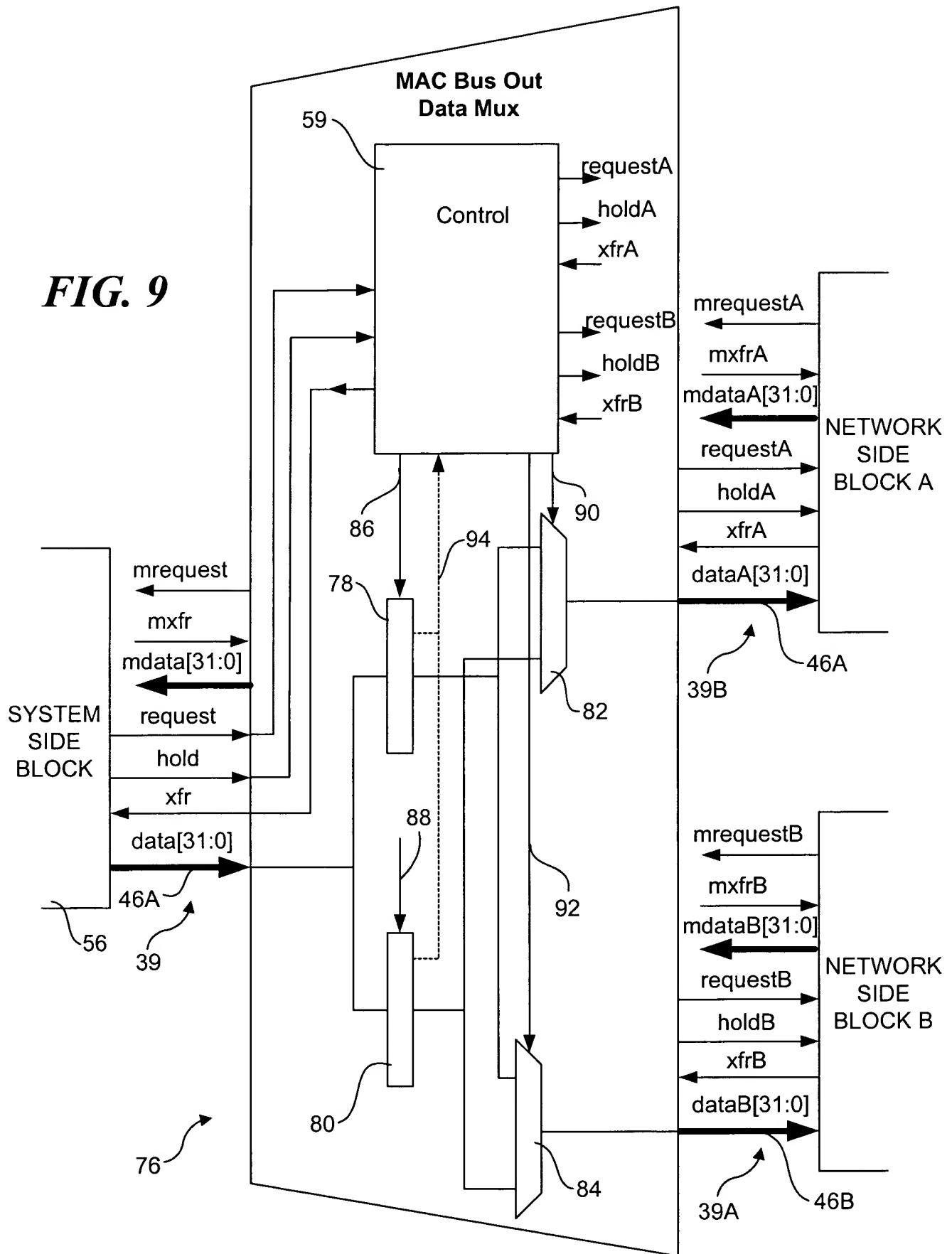


**FIG. 7**

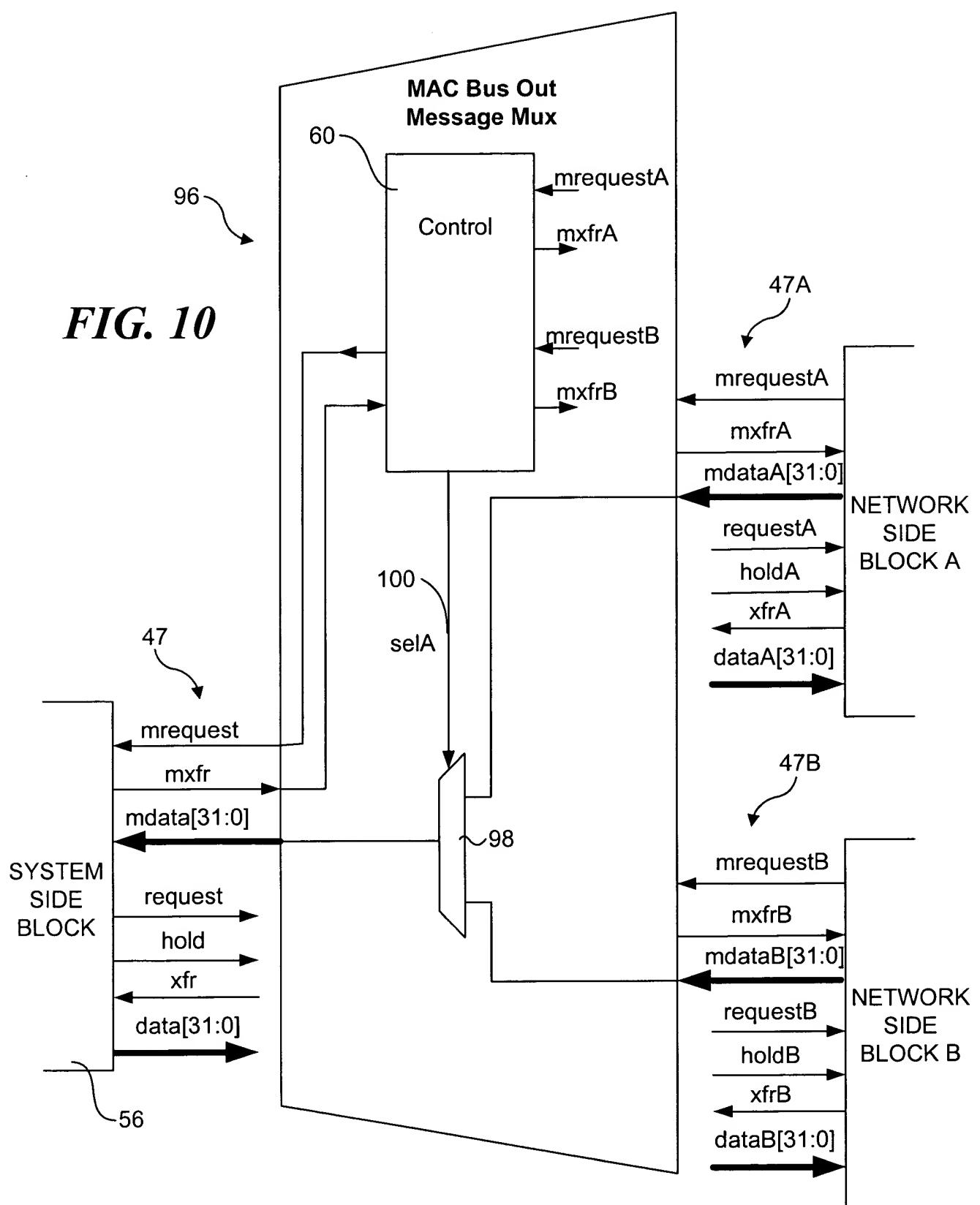
**FIG. 8**

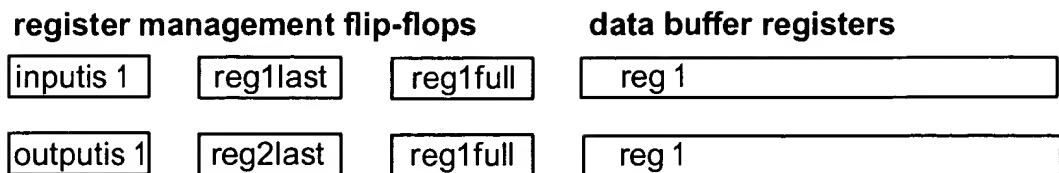


**FIG. 9**

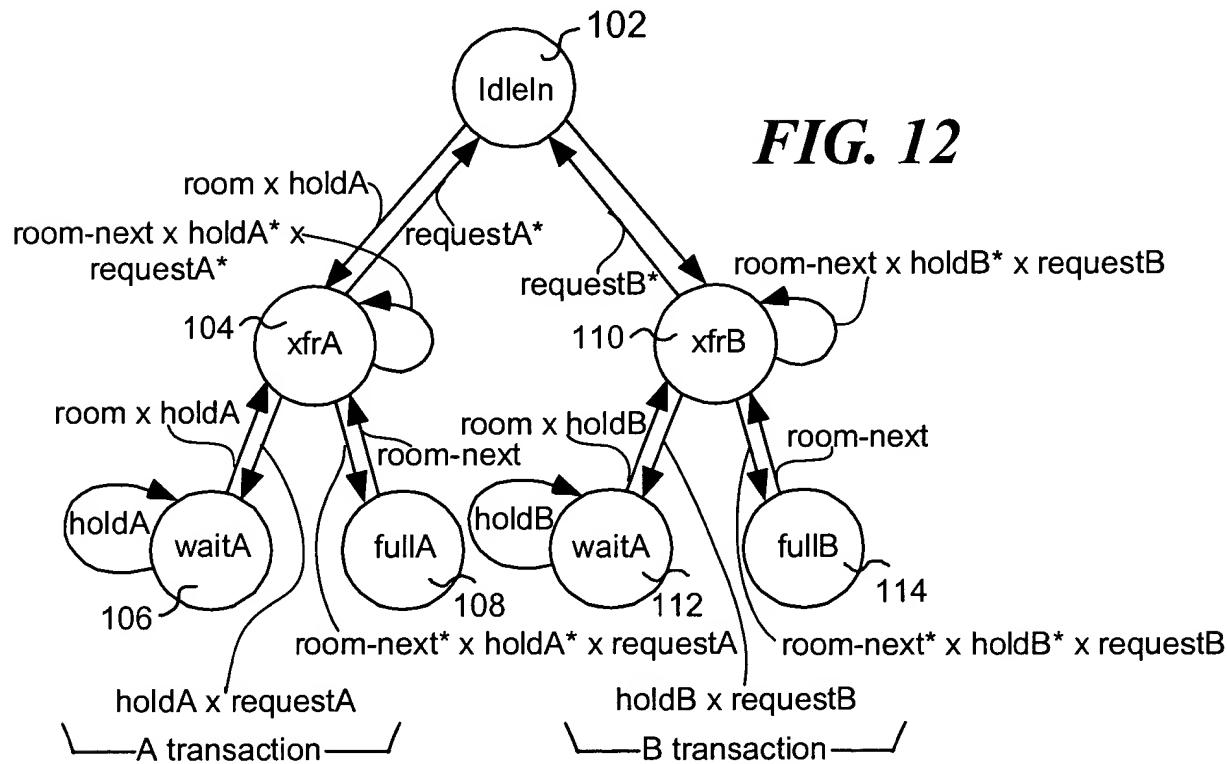


**FIG. 10**



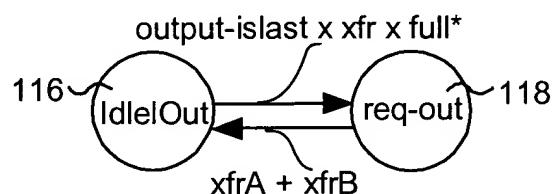


**FIG. 11**

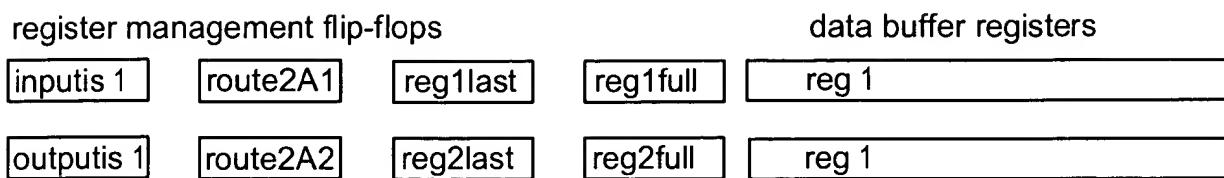


**FIG. 12**

$\text{transaction} = \text{IdleIn}^*$   
 $\text{room-next} = \text{empty} + \text{xfr}$   
 $\text{room} = \text{reg1full}^* + \text{reg2full} + \text{xfr}$   
 $\text{full} = \text{reg1full} \times \text{reg2full}$   
 $\text{empty} = \text{reg1full}^* \times \text{reg2full}^*$

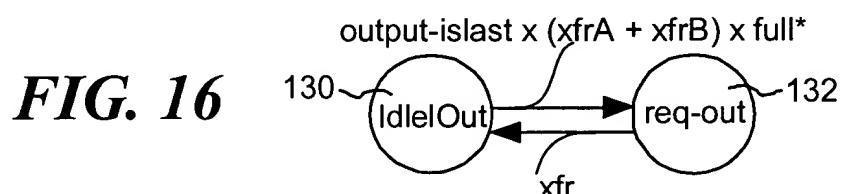
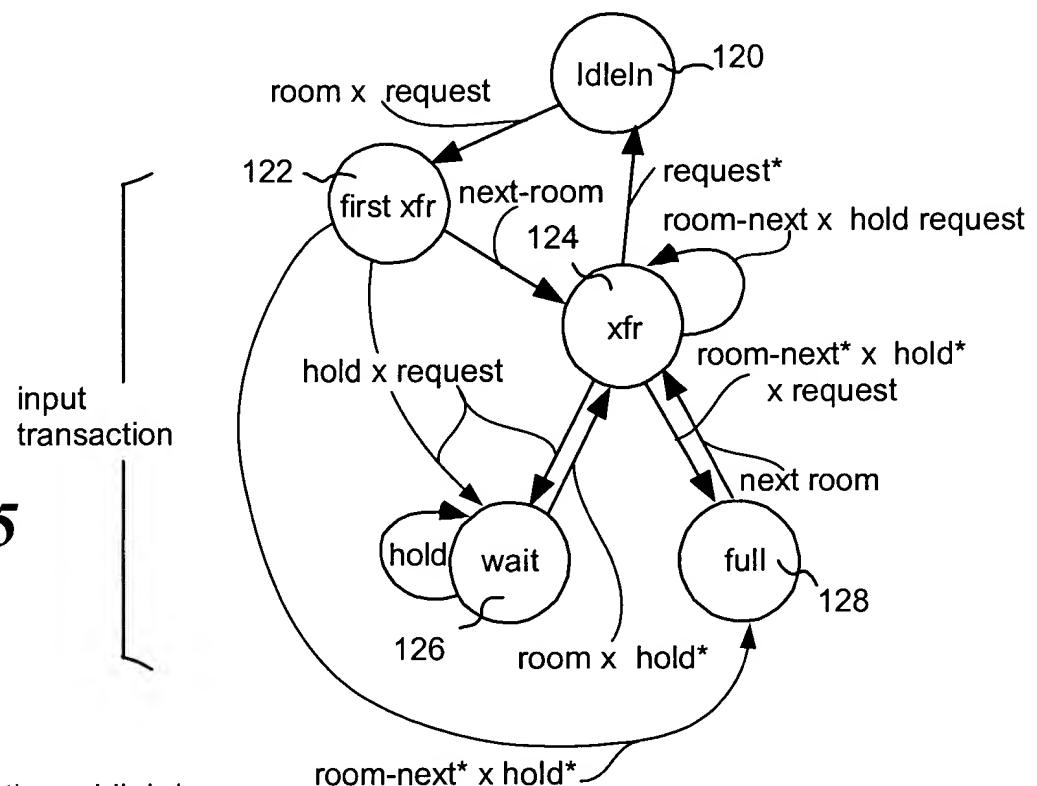


**FIG. 13**

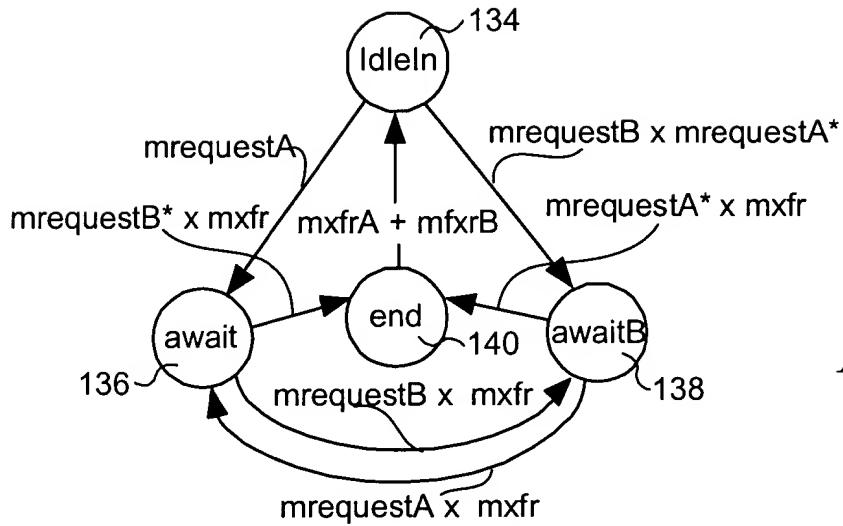


**FIG. 14**

**FIG. 15**



**FIG. 16**



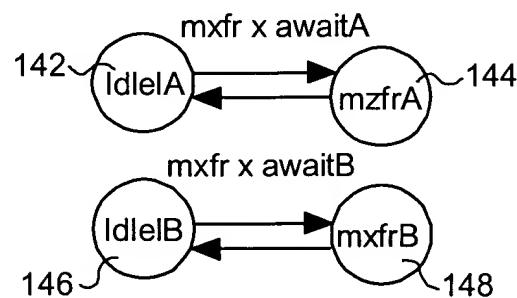
**FIG. 17**

Message transfers are one word long

$mrequest = awaitA = awaitB$

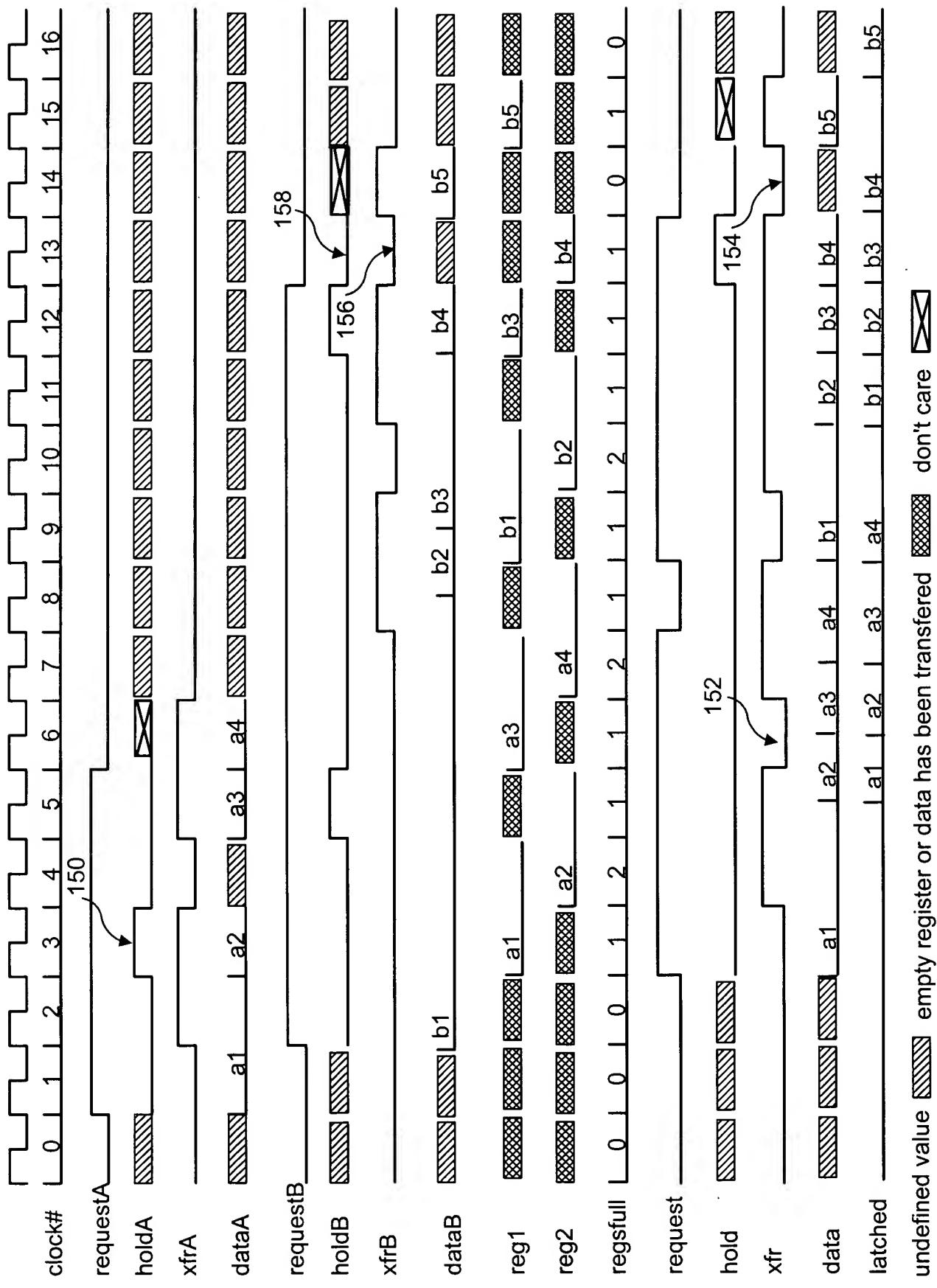
$selA = awaitA$

mxfr machines for A and B network side input port



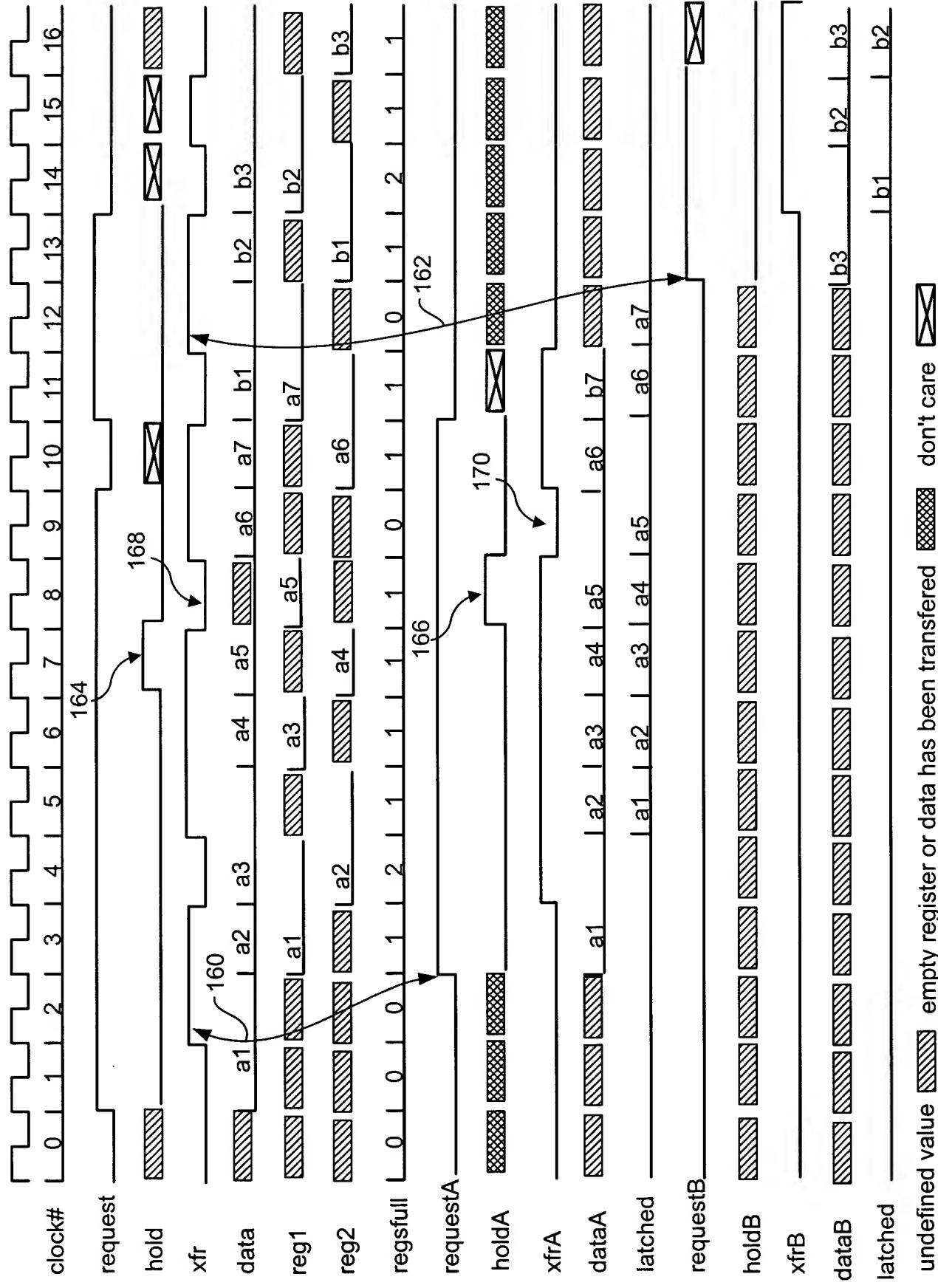
**FIG. 18**

00822P 955TP 55A 650

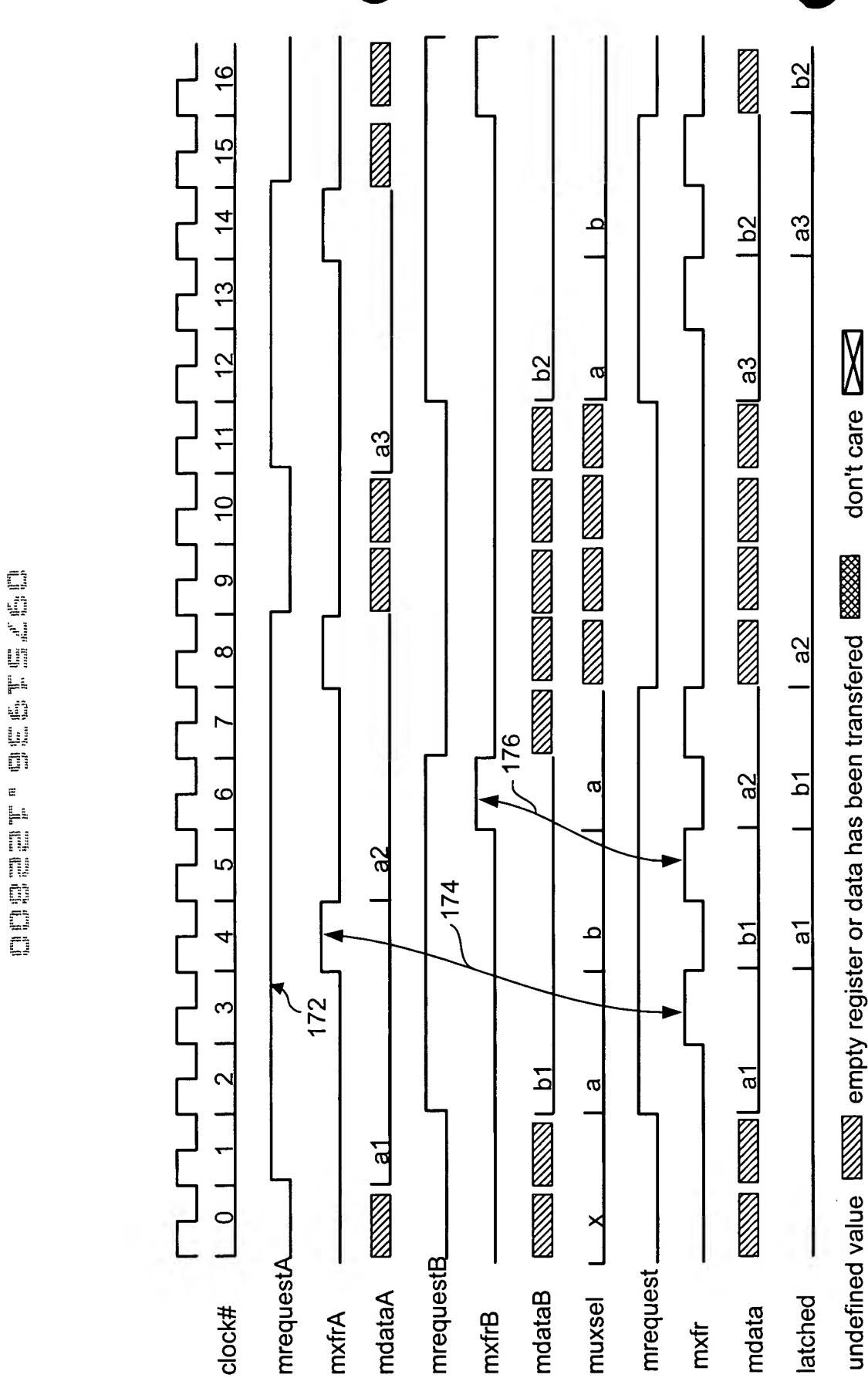


**FIG. 19**

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16



**FIG. 20**



**FIG. 21**